

A2
Sub
B'



HYZ-479CP(47508-577).ST25

#8

SEQUENCE LISTING

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Zhao, Qiuyan
Yu, Dong
Agrawal, Sudhir

<120> Modulation of Immunostimulatory Activity of Immunostimulatory
Oligonucleotide Analogs by Positional Chemical Changes

<130> HYZ-479CP (47508.577)

<140> US 09/965,116
<141> 2001-09-26

<150> US 09/712,898
<151> 2000-11-15

<150> US 60/235,452
<151> 2000-09-26

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 c at position 5 = C3-Linker

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<223> t = Methyl-phosphonate

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 t at position 4 = Methyl-phosphonate

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 t at position 16 = Methyl-phosphonate

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19

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c at position 5 = beta-L-Deoxynucleoside

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c at position 15 = beta-L-Deoxynucleoside

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ctatctgacg ttctctgt

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<222> 9, 10

<223> c at position 9 = beta-L-Deoxynucleoside

g at position 10 = beta-L-Deoxynucleoside

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<223> g = beta-L-Deoxynucleoside

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c at position 5 = C3-Linker

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18

<400> 93
cctactagcg ttctcatc

<210> 94
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 4, 5, 12
<223> a at position 4 = 1',2'-Dideoxyribose
c at position 5 = 1',2'-Dideoxyribose
t at position 12 = 2'-methoxyribonucleoside

18

<400> 94
cctactagcg ttctcatc

<210> 95
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

18

<400> 95
cctactaggc ttctcatc

<210> 96
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 10
<223> g = 7-deazaguanine

18

<400> 96
ctatctgacg ttctctgt

<210> 97
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 9
<223> g = 7-deazaguanine

18

<400> 97
ctatctgagc ttctctgt

<210> 98
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

18

<400> 98
tctcccagcg tgcgccat

<210> 99
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 10,14

<223> g at positions 10 and 14 = 7-deazaguanine

18

<400> 99
tctcccagcg tgcgcat

<210> 100
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 5
<223> c = C3-Linker

<221> modified_base
<222> 10
<223> g = 7-deazaguanine

18

<400> 100
ctatctgacg ttctctgt

<210> 101
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 10
<223> g = 6-thioguanine

18

<400> 101
ctatctgacg ttctctgt

<210> 102
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 9
<223> g = 6-thioguanine

18

<400> 102
ctatctgagc ttctctgt

<210> 103
<211> 18
<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<221> modified_base

<222> 9

<223> c = 4-thiouridine

18

<400> 103
ctatctgacg ttctctgt

<210> 104

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<221> modified_base

<222> 5

<223> c = 1,2-Dideoxyribose

<221> modified_base

<222> 9

<223> c = 4-thiouridine

18

<400> 104
ctatctgacg ttctctgt

<210> 105

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<221> modified_base

<222> 9

<223> c = Ara-C

18

<400> 105
ctatctgacg ttctctgt

<210> 106

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<221> modified_base

<222> 10

<223> c = Ara-C

19

<400> 106
ctactctgac cttctctgt

<210> 107
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 9
<223> c = 1',2'-Dideoxyribose

18

<400> 107
ctatctgacg ttctctgt

<210> 108
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 8
<223> a = 1',2'-Dideoxyribose

18

<400> 108
ctatctgacg ttctctgt

<210> 109
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 6
<223> t = 1',2'-Dideoxyribose

18

<400> 109
ctatctgacg ttctctgt

<210> 110
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base

<222> 4
<223> t = 1',2'-Dideoxyribose

18

<400> 110
ctatctgacg ttctctgt

<210> 111
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 11
<223> t = 1',2'-Dideoxyribose

18

<400> 111
ctatctgacg ttctctgt

<210> 112
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<221> modified_base
<222> 13
<223> c = 1',2'-Dideoxyribose

18

<400> 112
ctatctgacg ttctctgt